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The Interagency Committee on Disability Research (ICDR)
Assistive Technology/Technology (AT/ICT) Forum

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World Report on Disability, 2011

About 15% of the world's population lives with some form of disability. This equates to 1 billion people.

2-4% (100 – 400 million) experience significant difficulties in functioning.

2.2% (110 million) significant disabilities

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World Health Report, 2011

- And these numbers are growing exponentially due to aging populations, poverty, war, and poor health care services around the world.

Barriers to Disability Services

- Inadequate polices and standards
- Negative attitudes
- Lack of provision of services
- Problems with service delivery
- Inadequate funding
- Lack of accessibility in the built environment
- Lack of consultation and consumer involvement
- Lack of data and evidence

(World Health Report, 2011, pp. 9-10)

Barriers to AT…..

- Inadequate polices and standards
- Negative attitudes
- Lack of provision of services
- Problems with service delivery
- Inadequate funding
- Lack of accessibility in the built environment
- Lack of consultation and consumer involvement
- Lack of data and evidence

(adapted from World Health Report, 2011, pp. 9-10)

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How can ICT and AT Support Disability equitably?

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"Reading passion" in Romania.
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We need both ICT and AT

- And there is room for both!
- But, we must maintain a realistic picture of the world, as well as, the barriers and opportunities that exist in both industries.

We need both ICT and AT

- We have to identify areas of greatest impact and determine the best strategy for implementing and moving forward in a coherent fashion.

- At the same time, keeping our eye on the prize!

AT Industry….

Is often fragmented and fraught with difficulty for the faint of heart.

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What are the barriers to AT Practice?

- Reimbursement rates are so poor and so convoluted that multiple AT clinics throughout the U.S. and abroad are closing just when we need them most.

- There is a global lack of awareness of the benefits of AT devices and services by health care personnel, families, and persons with chronic health conditions.

What are the barriers to AT Practice?

- Educators are faced with difficult financial decisions in the schools and the need for low-cost and rapidly deployable solutions often drive device selection rather than a careful analysis of individual needs and preferences.

What are the barriers to AT Practice?

- AT practitioners and researchers overall have done a relatively poor job of providing potential payors with the evidence-based data needed to recognize the potential cost and time savings various technologies represent in the everyday lives of consumers and special education students.

What are the barriers to AT Practice?

- Manufacturers do not always have available resources to conduct vitally needed consumer-based product testing, marketing analyses or to provide comprehensive technical assistance.

- There is a critical need to increase the rigor required early in the innovation/product design process—particularly for federally funded, university driven research and development projects.

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What are the barriers to AT Practice?

- Ready access to ICT solutions can create policy and payor perceptions that:
  - AT needs can be taken care of quickly, easily, and inexpensively;
  - One solution fits all (or enough that it doesn't matter);
  - It's no longer my problem.

What's Happening?

- AT industry platform historically trends toward windows desktop platform for many companies. Windows platforms used for marketing, business administration and product delivery—e.g. software on many products.

- Mainstream IT industry trends are moving rapidly to web (HTML 5) and Mobile/wireless, while the Windows platform is quickly losing market share.

- Mobile applications (apps) are exploding, many with AT claims, but lacking evidence-based approaches/knowledge in their development resulting in a 'buyer beware' culture and potentially negative impact on AT industry.

What's Happening?

- Customers worldwide (parents/children) are growing up in a technology rich environment and expect AT applications to mirror the 'slick' look and feel of mainstream technologies such as Ipad, Iphone, android, etc. Customers (and many clinicians) have limited ability to evaluate a 'best technology solution' for persons with disabilities and can be taken in by slick look and low price.

- Business models (IT and AT) are changing rapidly and many AT companies are ill-prepared for this change.

What's Happening?

- Perception exists that large mainstream IT industry is already doing accessibility 'in-house'. Mainstream industry could benefit from AT manufacturers working together to identify and address accessibility issues.

- Both the AT and IT industry are stretched very thin. There is a tremendous potential for AT industry to develop new technologies and applications, along with new approaches taking advantage of emerging mainstream industry trends.

- Not all of the AT industry is being impacted, but for those that are, this is a critical time.

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AT and Niche Markets

Taking the Pulse: A Survey of the AT Industry

AT industry members are defined as:

- A.T. manufacturers, developers and distributors;
- Consumer technology accessibility developers;
- Persons with disabilities who use AT and mainstream commercial technologies and their families;
- A.T. practitioners;
- Rehabilitation specialists involved in technology and disability;
- Special educators and special education teams (0-21);
- Researchers and university faculty;
- Association special interest groups that focus on meeting the needs of persons with disabilities requiring the use of technology to reach maximum potential, and;
- Funding organizations the pay for the acquisition of A.T. and A.T. services.

Taking the Pulse: A Survey of the AT Industry

- In collaboration with the AT Industry Association Research Committee

- Survey is designed to learn more about the impact of this rapidly changing Environment.

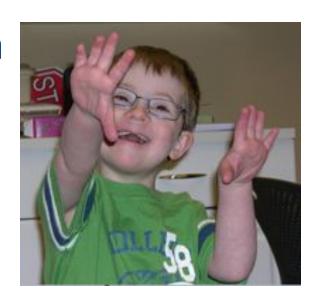- Plans to survey both AT Industry and Practitioners

Taking the Pulse: A Survey of the AT Industry

- **Queries knowledge attainment**
- **Legislative/Policy impact**
- **Funding Streams**
- **Technology Assessments**
- **Purchasing Decision-making**
- **Attitudes about abandonment**

Taking the Pulse: A Survey of the AT Industry

- Perceptions of Universal Design
- Opportunities for Practitioners and the AT Industry to take advantage of 'generalized' technologies such as the iPad
- Threats to the growth and potential of the AT Industry
- Opportunities for growth and potential of the AT Industry

Taking the Pulse: A Survey of the AT Industry

- **Current Status of Survey**
  - Piloting with 30 practitioners/AT Manufacturers
  - Refine Survey
  - Seek funding to disseminate survey widely

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AT Industry

Inadequate polices and standards
Negative attitudes
Lack of provision of